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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/707,364	12/09/2003	Wen-Long Chin	ADMP0001USA	1363
27765	7590	07/09/2007	EXAMINER	
NORTH AMERICA INTELLECTUAL PROPERTY CORPORATION			MEONSKE, TONIA L	
P.O. BOX 506			ART UNIT	PAPER NUMBER
MERRIFIELD, VA 22116			2181	
NOTIFICATION DATE		DELIVERY MODE		
07/09/2007		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/707,364	CHIN, WEN-LONG	
Examiner	Art Unit		
Tonia L. Meonske	2181		

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 09 December 2003.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-11 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-11 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 09 December 2003 is/are: a) accepted or b) objected to by the Examiner.

 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date. ____ .
3) Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____ . 5) Notice of Informal Patent Application
6) Other: ____ .

DETAILED ACTION

Specification

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Walters et al., US Patent 5,768,593 (herein after referred to as "Walters").

4. Referring to claim 1, Walters has taught a method for controlling an instruction memory (IM) of an embedded system, wherein the embedded system is electrically connected to a memory device used for storing a plurality of program code segments (Figure 2, element 118 stores a plurality of code segments.), and the embedded system comprises:

- a. the instruction memory for receiving and registering the program code segments stored in the memory device (Figure 2, element 118 receives, registers and stores program code segments.); and an execution unit for executing the program code segments (Figure 3, elements 164 and 172); the method comprising the following steps:

- (a) setting up a look-up table for recording an operation status of the instruction memory (Figure 2, elements 142 and 148);
- (b) selecting a specific program code segment from the program code segments and executing the specific program code segment with the execution unit (Figure 3, elements 164 and 172);
- (c) determining if the specific program code segment has been stored in the instruction memory according to the look-up table before performing step (b) (Figure 3, element 162);
- (d) reading the specific program code segment from the instruction memory to execute with the execution unit if the result of step (c) is true (Figure 3, element 164); and
- (e) loading the specific program code segment from the memory device to execute with the execution unit if the result of step (c) is false (Figure 3, elements 170 and 172).

5. Referring to claim 2, Walters has taught the method of claim 1, as described above, and wherein step (e) further comprises the following step: (f) storing the specific program code segment into the instruction memory and refreshing a record of the look-up table for recording that the specific program code segment has been stored in the instruction memory (Figure 3, elements 170 and 172, The table is refreshed when the code block is cross compiled.)

6. Referring to claim 3, Walters has taught the method of claim 2, as described above, and wherein step (e) further comprises the following steps: (g) checking if the

instruction memory has enough space for storing the specific program code segment before performing step (f) to store the specific program code segment into the instruction memory (column 4, column 7, line 63-column 9, line 37, cache overflow, if there is not enough room to store the code segment, then the cache overflows.);

(h)storing the specific program code segment into the instruction memory if the result of step (g) is true (column 4, column 7, line 63-column 9, line 37, column 9, lines 3-37, column 16, lines 54-58); and

(i)overlapping the instruction memory with the specific program code segment if the result of step (g) is false (column 9, lines 3-37, cache overflow).

7. Referring to claim 4, Walters has taught the method of claim 3, as described above, and wherein step (i) further comprises the following step: (j)refreshing the look-up table to record that the specific program code segment has been stored into the instruction memory and another program code segment originally stored in the instruction memory has been erased (column 7, line 63-column 9, line 37, The cache is flushed and other segments are stored in the empty entries.).

8. Referring to claim 5, Walters has taught the method of claim 1, as described above, and wherein execution of steps (a) to (e) is controlled by the execution unit (column 16, lines 24-28).

9. Referring to claim 6, Walters has taught the method of claim 1, as described above, and wherein the embedded system is electrically connected to a host, the host comprising a control circuit for controlling the execution of steps (a) to (e) (Figure 1, element 102, CPU).

10. Referring to claim 7, Walters has taught the method of claim 1, as described above, and wherein each of the program code segments comprises a plurality of instructions (abstract, The code blocks each contain a plurality of instructions.).
11. Referring to claim 8, Walters has taught the method of claim 1, as described above, and wherein the execution unit is an application specific integrated circuit (ASIC) (Figure 1, element 102, CPU).
12. Referring to claim 9, Walters has taught the method of claim 1, as described above, and wherein the embedded system is used for encryption or decryption (column 3, lines 34-45, The system decrypts non-native code into native code so that the processor may execute the instructions.).
13. Referring to claim 10, Walters has taught the method of claim 1, as described above, and wherein the look-up table is set up in the memory device (Look-up table, element 118, is set up in memory device element 106.).
14. Referring to claim 11, Walters has taught the method of claim 1, as described above, and wherein the look-up table is set up in the instruction memory (Look-up table, element 118, is set up in instruction memory element 106.).

Conclusion

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tonia L. Meonske whose telephone number is (571) 272-4170. The examiner can normally be reached on Monday-Friday with first Friday's off.

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16. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Donald Sparks can be reached on (571) 272-4201. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

17. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TLM



Tonia L. Meonske
June 22, 2007